

Bridge Inspection							
Bridge File Number	74228 -1 Bridge			Form Type	SG		
Year Built/Year Supstr	1972/1972			Lot No.	2		
Bridge or Town Name	GRANDE PRAIR			Inspector Name	Brian Pientsch		
Located Over	666:02 C1 36.299;WAPITI RIVER, 8.10.58.18, WATERCRS-ST			Inspector Class	BR CLS A		
Located On	40:42 C1 29.678			Assistant Name			
Water Body Cl./Year				Assistant Class			
Navigabil. Cl./Year				Inspection Date	21-Aug-2012		
Legal Land Location	SW SEC 23 TWP 70 RGE 6 W6M			Data Entry By	Theresa Lacusta		
Longitude, Latitude	-118:48:15, 55:04:19			Data Entry Date	23-Oct-2012		
Road Authority	Alberta Transportation (AIT)			Reviewer Name	Eric Carcoux		
Contract Main. Area	CMA05			Review Date	22-Oct-2012		
Clear Roadway/Skew	9.8 / -20 deg. (LHF)			Dept. Reviewer Name	David Morrison		
AADT/Year	2,640 / 2011 (A)			Dept. Review Date	15-Jan-2013		
Road Classification	RAU-213.4-110			Follow-Up By			
Detour Length (km)	75						
Allowable Load (t):	Single	CS1 51 GIRDER	Semi	CS2 56 GIRDER	Train	CS3 63 GIRDER	----> On Critical Spans ---->Critical Member
Design Loading:	HS20						----> Primary Span

Posting Information												
Required Vert. Clearance Posting (m)			UNDER: 666 C1 5.4m									
Posted Vertical Clearance (Y/N)			Yes									
Posted:	Lane	EB	On Bridge (m)	5.7	In Advance (Y/N)	No	Lane	WB	On Bridge (m)	5.7	In Advance (Y/N)	No
Remarks		LOCATED UNDER S. SPAN, ROAD UNDER BRIDGE.										
Required Load Posting (t)			Single		Semi		Truck Train					
Posted Loading (t)			Single		Semi		Truck Train					
Posted:	Lane	NB	At Junction (Y/N)	No	In Advance (Y/N)	No	At Bridge (Y/N)	No				
Posted:	Lane	SB	At Junction (Y/N)	No	In Advance (Y/N)	No	At Bridge (Y/N)	No				
Remarks		Not required										
Hazard Marker At Bridge (Y/N)		Yes										
Remarks		NE broken off.										
Other Sign Types		INFORMATION (numerous)										

Utilities (Located at)			
Utility Attachments			
Telephone	Pedestal W. side.		Gas
Power			Municipal
Others			Problem (Y/N) Yes
Remarks		utilities hanging from bridge & on headslope.	

Approach Road				
		Last	Now	Explanation of Condition
Horizontal Alignment		5	5	Intersection with SH 666 at S. end of bridge. Steep grade at N. end. Widens to 3 lanes at ends. Draining onto abuts.
Vertical Alignment		5	5	
Roadway Width (m)	10.200			Numerous accident damage locations on North approach, both sides throughout where guardrail is dented and posts out of alignment. Several post locations with missing bolts. Large gravel windrows under approach rail.
Approach Bump		7	7	
Guardrail (Y/N)	Yes			
Guardrail		4	3	
Length (m)	42.000			
Current Standard (Y/N)	Yes			
Termination Type	Turned down			

Approach Road					
			Last	Now	Explanation of Condition
Drainage			5	3	NE ditch scoured 70mLx3.6mWx3.7mD at worst location.-photo
Approach Road General Rating			5	3	NW ditch scoured 30mLx3mWx1mD.
Superstructure					
Bridge Component			Last	Now	Explanation of Condition
(Primary Span : WG, 5 Spans, Lengths(m): 33.5-48.8-61-48.8-33.5, A-Ident Number: A0661-02;A0661-03;A0661-04)					
Special Features					
Special Feature				3	SE gate chain link pushed back. SW gate lock missing. Installed lock on NW gate.
(Type :)					
Special Feature				X	
(Type :)					
Wearing Surface/Deck Top Detail Ratings					
	N (%)	1 (%)	2 (%)	3 (%)	Partially gravel covered.
Last	30	0	0	0	
Now	1.0				
Wearing Surface			7	7	
(Material Type : CONCRETE)					
(Thickness(mm) : 50)					
Deck Top			X	X	
Deck Rideability			9	9	
Deck Joints			3	5	Snowplow guards repaired.
Temperature (deg. C)		20			
(Expansion Type : GLAND (SILICON SEAL))					
(Fixed Type : FINGER PLATES;GLAND (SILICON SEAL))					
Gap Size (mm)		Gap Location			
100		South abut			
20		SP			
25		NP			
98		N abut			
Deck Drainage			7	7	
Drains Clogged (Y/N)		No			
Curbs/Median			3	4	Cracking around post East side center of bridge due to accident. Curb formwork left in place pier 1 and 4.-repaired Spall 200mmWx800mmL East, center of bridge span 2.-repaired Spall 0.4x0.2 over pier 2. East curb - rebar exposed.
(Curb Type : Standard)					
Scaling (Percent Area)		0			
Bridge Rail			4	3	Spall 300mmWx1100mmL West side, center of span 2.- repaired Rail bent West side, center of span 2 in two places.-photo
(Type : GALVANIZED STEEL BRIDGE TUBE;STEEL BRIDGE TUBE)					
Bridge Rail Posts			3	3	Spall 0.3m x 0.7m West side center of span 2.-photo Vertical tear on bridgerail post on West side of Span 2.-photo
(Type : GALVANIZED POST STEEL;GALVANIZED POST STEEL)					
Bridge Rail/Posts Coating			7	7	
(Type : GALVANIZED)					
Sidewalk			X	X	

Superstructure					
Bridge Component		Last	Now	Explanation of Condition	
(Primary Span : WG, 5 Spans, Lengths(m): 33.5-48.8-61-48.8-33.5, A-Ident Number: A0661-02;A0661-03;A0661-04)					
Girder/Beam					
Cover Plate		X	X	High load damage with bent flanges span 1	
Flange		4	4		
Web		8	8		
Stiffeners		8	8		
Splice		8	8		
Weld		8	8		
Diaphragms/Cross Frame		8	8		
Paint Condition		4	4	10% paint failure mainly on bottom flange area & @ exterior girders @ abuts.	
(Colour Description : GREEN)					
(Colour Code : 14193)					
Touchup Required (Y/N)	Yes				
Bearings		4	4	One nut missing off anchor bolt NE corner, one anchor is too short NE corner. OUTSIDE GIRDER ROCKER BEARINGS ARE RUSTING @ BOTH ABUT & N & S PIERS P2.-REPAIRED(REPRINTED) Grout pad deteriorating @ NE.-repaired	
Temperature (deg. C)	20				
(Expansion Type : ROCKER BEARING)					
(Fixed Type : PINNED BEARING)					
Coating Adequate (Y/N)	Yes				
Functioning (Y/N)	Yes				
Deck Underside		5	5		
Stains (Percent Area)	1				
Span Alignment Problems					
Vertical (Y/N)	No				
Horizontal (Y/N)	No				
Superstructure General Rating		4	4		
Substructure					
Bridge Component		Last	Now	Explanation of Condition	
Abutments					
Bearing Seats/Caps		6	6		
(Type : CONCRETE)					
Backwalls/Breastwalls		5	5		
Wingwalls		6	6		
Piles		N	N		
Paint/Coating		5	5		
Abutment Stability		8	8		
Scour/Erosion		5	5		
Piers/Bents					
(Type : PIER-SOLID)				Spall at pier 4 west side. Minor delamination cracks top of S. pier. W. side. Lots of graffiti.	
Bearing Seats/Caps		5	5		
(Type : CONCRETE)					
(Total Number of Bearing Piles : 0:0:0:0)					
Pier Shaft/Piles		6	6		
Bracing/Struts/Sheathing		X	X		

Substructure				
Bridge Component		Last	Now	Explanation of Condition
Nose Plate		6	6	100% rust on nose plate.
Paint/Coating		4	4	
(Colour Description :)				
(Colour Code :)				
Pier Stability		7	7	
Scour		7	7	
Debris (Y/N)	No			
Substructure General Rating		5	5	
Structure Usage				
		Last	Now	Explanation of Condition
Channel				
(U/S Direction : W)				40 degree bend u/s.
(D/S Direction : E)				
Alignment		4	4	
Bank Stability		4	4	Eroding at the SW corner of slope protection.
HWM (m below Top of Curb)				HWM not visible.
Drift (Y/N)				
Slope Protection		5	5	None @ N. headslope rivulets.
(Type : NATURAL; NATURAL)				Concrete slope protection S. headslope.
Guidebank/Spurs		5	5	
Adequacy of Opening		7	7	
(Fish Compensation Measure 1 : NONE)				
(Fish Compensation Measure 2 : NONE)				
Channel General Rating		4	4	
Grade Separation				
Road Alignment		5	5	Curves both sides, no passing.
Traffic Safety Features		4	4	2 posts pushed out of alignment.
Type	Guardrail			
Slope Protection		5	5	
(Type : NATURAL; NATURAL)				
Bank Stability		7	7	
Drainage		7	7	
Grade Separation General Rating		4	4	

Maintenance Recommendations							
Inspector Recommendations	Year	Inspector Comments	Department Comments	Target Year	Est. Cost	Cat #	
REPAIR/REPLACE BRIDGE RAIL	2013	Replace bent guardrail and posts.					
GALVANIZE/PAINT BRIDGE RAIL							
RETROFIT BRIDGE RAIL							
SEAL CURBS							
PATCH DECK							
SEAL DECK							
OVERLAY DECK							
REPAIR/REPLACE DECK JOINTS							
RESET/ PAINT BEARINGS							
REPAINT SUPERSTRUCTURE							
STRAIGHTEN/REPLACE MEMBERS							
WASHING							
SHOTCRETE REPAIRS							
REPAIR ABUTMENT SCOUR/EROSION							
PLACE ADDITIONAL RIP RAP	2013	Armour North ditches with gabion baskets to prevent further erosion.					
REMOVE DRIFT ACCUMULATION							
OTHER ACTION	2013	Repair spalls on East and West sides of S2.					
OTHER ACTION	2013	Repair approach guardrail					
OTHER ACTION	2013	Reinstall hazard markers.					
OTHER ACTION	2013	Repair S side catwalk gates.					
OTHER ACTION	2013	Repair grout pad and anchor bolt at NE abut.					
OTHER ACTION	2013	Repair fence for catwalk and install missing locks X 2.					
OTHER ACTION	2013	Repair/replace damaged bridgerail post.					
OTHER ACTION							
OTHER ACTION							
OTHER ACTION							
OTHER ACTION							
OTHER ACTION							
Structural Condition Rating (Last/Now) (%)	50.0/50.0	Sufficiency Rating (Last/Now) (%)	43.7/33.4	Est. Repl. Yr	2038	Maint. Req'd. (Y/N)	Yes
Special Comments for Next Inspection			Department Comments				
Maintenance Reviewed By			Date			Estimated Total	0
Proposed Long-Term Strategy							
On 3-Year Program (Y/N)							

Proposed Action			
Previous Inspector's Name	Brian Pientsch	Previous Assistant's Name	
Next Inspection Date	21-May-2014	Previous Inspection Date	26-Nov-2010
Inspection Cycle (Default) (months)	21		
Comment			